

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) Solid phase extraction process for extracting an analyte from a sample comprising one or more of the following steps:
 - a) conditioning a sorbent in a cartridge by passing a liquid suitable for conditioning through the cartridge;
 - b) applying a sample that contains the analyte to the sorbent by passing a liquid which contains the sample through the cartridge;
 - c) washing the sorbent by passing a wash liquid through the cartridge;
 - d) eluting the analyte from the sorbent by passing an elution liquid through the cartridge,

~~characterised in that~~wherein the temperature of the cartridge is raised or lowered to a predetermined value during one or more of the steps a) to d).
2. (Currently Amended) Solid phase extraction process according to Claim 1,

~~characterised in that~~wherein the temperature of the cartridge is raised or lowered by heating or cooling one or more of the liquids used in step a) to d) before feeding to the cartridge.
3. (Currently Amended) Solid phase extraction process according to Claim 1,

~~characterised in that~~wherein the temperature of the cartridge is raised or lowered in step a), preferably by heating or cooling the liquid for conditioning of the sorbent.
4. (Currently Amended) Solid phase extraction process according to Claim 1,

~~characterised in that~~wherein the temperature of the cartridge is raised or lowered in step b), preferably by heating or cooling the liquid which contains the sample.

5. (Currently Amended) Solid phase extraction process according to Claim 1, ~~characterised in that~~wherein the temperature of the cartridge is raised or lowered in step c), preferably by heating or cooling the wash liquid.

6. (Currently Amended) Solid phase extraction process according to Claim 1, ~~characterised in that~~wherein the temperature of the cartridge is raised or lowered in step d), preferably by heating or cooling the elution liquid.

7. (Currently Amended) Solid phase extraction according to Claim 1 which also comprises the step of drying the cartridge, before or after one or more of the steps a) to d), drying being carried out by passing a suitable gas through the cartridge, ~~characterised in that~~wherein the gas is heated prior to feeding to the cartridge.

8. (Currently Amended) Solid phase extraction instrument comprising:

- at least one line system for transporting a liquid;
- a cartridge exchanging system having at least one cartridge holder ~~3~~ for holding a cartridge ~~11~~ incorporated in the line system;
- a sample feed device ~~41~~ connected to the line system;
- a solvent feed device ~~40~~ connected to the line system,

wherein the sample feed device ~~41~~ and the solvent feed device ~~40~~ are connected by the line system to the cartridge holder ~~3~~ such that a liquid can be transported from the sample feed device ~~41~~ or the solvent feed device ~~40~~ to the cartridge holder ~~3~~ and can pass through the cartridge ~~11~~,

~~characterised in that~~wherein

the line system is provided with heating and/or cooling means ~~73~~ such that the liquid issuing from the sample feed device ~~41~~ or the solvent feed device ~~40~~ flows successively through the heating and/or cooling means ~~73~~ and the at least one cartridge holder ~~3~~.

9. (Currently Amended) Solid phase extraction instrument according to Claim 8, comprising a control system, ~~characterised in that~~wherein the control system is equipped to be able to control the heating and/or cooling means.

10. (Currently Amended) Solid phase extraction instrument according to Claim 8, ~~characterised in that~~wherein the line system is provided with a gas connection and valve means in order to connect the gas connection to the heating and/or cooling means ~~73~~ and the at least one cartridge holder ~~3~~ in such a way that gas issuing from the gas connection flows successively through the heating and/or cooling means ~~73~~ and the at least one cartridge holder ~~3~~.

11. (Currently Amended) Solid phase extraction instrument, comprising:

- at least one line system for transporting a liquid;
- a cartridge exchanging system having at least one cartridge holder ~~3~~ for holding a cartridge ~~11~~ incorporated in the line system;
- a sample feed device ~~41~~ connected to the line system;
- a solvent feed device ~~40~~ connected to the line system; and
- a control system,

wherein the sample feed device ~~41~~ and the solvent feed device ~~40~~ are connected by the line system to the cartridge holder ~~3~~ such that a liquid can be transported from the sample feed device ~~41~~ or the solvent feed device ~~40~~ to the cartridge holder ~~3~~ and can pass through the cartridge ~~11~~,

~~characterised in that~~wherein

the cartridge exchanging system comprises:

- at least one cartridge magazine ~~17~~ having a multiplicity of cartridge locations or at least one cartridge magazine holder ~~14~~ in which at least one cartridge magazine ~~17~~ having a multiplicity of cartridge locations can be accommodated; and

- a transport system for moving cartridges-11; and in that the control system is equipped to:
 - determine one of the multiplicity of cartridge locations depending on a command given to the control system via input means; and
 - control the transport system to move a cartridge 11-between a cartridge location and a cartridge holder-3, or vice versa.

12. (Currently Amended) Solid phase extraction instrument according to Claim 11, ~~characterised in that~~wherein the cartridge exchanging system comprises two of said cartridge holders 3-incorporated in the line system and that the control system is equipped to control the transport system to move a cartridge 11-between the two cartridge holders-3.

13. (Currently Amended) Solid phase extraction instrument according to Claim 11, ~~characterised in that~~wherein the transport system comprises a guide bridge 18-with one or more cartridge grippers 19-mounted thereon and movable along said guide bridge-18, in that the guide bridge 18-is mounted above the at least one cartridge magazine-17, or the at least one cartridge magazine holder-14, and in that the guide bridge 18-and the at least one cartridge magazine-17, or the at least one cartridge magazine holder-14, are movable relative to one another in a direction essentially transverse to the longitudinal direction of the guide bridge-18, and in that the control system is equipped to control this mutual movement.

14. (Currently Amended) Solid phase extraction instrument according to Claim 12, ~~characterised in that~~wherein the transport system comprises two cartridge grippers 19-for picking up, moving and setting down cartridges-11, which cartridge grippers 19-can be controlled essentially independently of one another by the control system.

15. (Currently Amended) Solid phase extraction instrument according to Claim 14, ~~characterised in that~~wherein the control system is equipped to move the at least one cartridge magazine-17, or the at least one cartridge magazine holder-14.

16. (Currently Amended) Solid phase extraction instrument according to Claim 13, ~~characterised in that~~wherein this comprises at least two cartridge magazines-17, or cartridge magazine holders-14, which are positioned alongside one another viewed in the longitudinal direction of the guide bridge 18-and in that said cartridge magazines-17, or cartridge magazine holders-14, are movable relative to one another in the transverse direction of the guide bridge-18, and in that the control system is equipped to move said cartridge magazines-17, or cartridge magazine holders-14, relative to one another.

17. (Currently Amended) Solid phase extraction instrument according to Claim 11, ~~characterised in that~~wherein the input means are equipped for entering an operator's choice for a specific solid phase extraction process and in that the control system is equipped to select the type of cartridge belonging to that specific solid phase extraction process; and/or in that the input means are equipped to enter an operator's choice for a specific type of cartridge, the control system being equipped to determine the specific cartridge location which contains an unused cartridge of that selected or specified type of cartridge.

18. (Currently Amended) Solid phase extraction instrument according to Claim 11, wherein the at least one line system comprises at least one single or multi-way valve which is functionally connected to the control system for operation, and comprises at least two cartridge holders-3, ~~characterised in that~~wherein the control system is equipped to:

- a) switch two cartridge holders in series; and/or
- b) to switch the one cartridge holder in liquid communication with a solvent feed device located upstream thereof and to be able to switch the other cartridge holder in simultaneous liquid communication with a sample feed device located upstream thereof; and/or

to switch the one and the other cartridge holder each in mutual simultaneous liquid communication with a solvent feed device or a sample feed device.

19. (Currently Amended) Solid phase extraction instrument according to Claim 11, ~~characterised in that~~wherein at least one cartridge magazine 17 and/or the cartridges 11 are provided with code means for the type of cartridge in each cartridge location or for the type of cartridge, and in that the solid phase extraction instrument is provided with reading means for reading the code means and for transmitting the code(s) read to the control system.

20. (Currently Amended) Solid phase extraction instrument according to Claim 19, ~~characterised in that~~wherein the control system is equipped to control the reading means to read the code means in order to store the type of cartridge associated with each cartridge location in a cartridge memory.

21. (Currently Amended) Solid phase extraction instrument according to Claim 20, ~~characterised in that~~wherein the control system is equipped to assign a used or unused status to each cartridge location in the cartridge memory.

22. (Currently Amended) Solid phase extraction instrument comprising

- at least one line system for transporting a liquid;
- a cartridge exchanging system having at least one cartridge holder 3 for holding a cartridge 11 incorporated in the line system;
- a sample feed device 41 connected to the line system;
- a solvent feed device 40 connected to the line system; and
- a control system,

wherein the sample feed device 41 and the solvent feed device 40 are connected by the line system to the cartridge holder 3 such that a liquid can be transported from the sample feed device 41 or the solvent feed device 40 to the cartridge holder 3 and can pass through the cartridge 11,

~~characterised in that~~wherein

the solvent feed device comprises an injection ~~pump 44 consisting~~ pump consisting of a piston housing ~~45~~, in which piston ~~46~~ is accommodated, which piston ~~46~~ can be controlled by means of the control system for movement and

in that the control system is equipped to control the suction stroke speed and/or the suction stroke length of the injection ~~pump 44 so~~ pump so as to draw in solvent at a specific speed or in a specific quantity.

23. (Currently Amended) Solid phase extraction instrument according to Claim 22, ~~characterised in that~~ wherein the injection ~~pump 44 has~~ pump has been designed with a capacity such that it is able to take up the total quantity of solvent required for a solid phase extraction step in order to be able to force this through the line system with an uninterrupted delivery stroke.

24. (Currently Amended) Solid phase extraction instrument according to Claim 23, ~~characterised in that~~ wherein the control system is equipped first to control the injection ~~pump 44 to~~ pump to take up the total quantity of solvent required for a solid phase extraction step and then to control the injection ~~pump 44 to~~ pump to force this total required quantity through the line system with an uninterrupted delivery stroke.

25. (Currently Amended) Solid phase extraction instrument according to Claim 22, ~~characterised in that~~ wherein the control system is equipped to be able to control the injection ~~pump 44 for~~ pump for a delivery stroke with an essentially constant speed or delivery pressure.

26. (Currently Amended) Solid phase extraction instrument according to Claim 22, ~~characterised in that~~ wherein a pressure sensor ~~48 for~~ measuring the pressure in the injection ~~pump 44 is~~ pump is provided in or by the injection ~~pump 44~~ pump, which pressure sensor ~~48~~ is actively connected to the control system in order to transmit a pressure signal to the latter.

27. (Currently Amended) Solid phase extraction instrument according to Claim 22, ~~characterised in that~~wherein the solvent feed device 40 comprises a first multi-way valve 49 to which, on the one side, the injection ~~pump 44 is~~ pump is connected by means of the suction channel 47 and which, on the other side, is provided with a number of solvent connections to which solvent reservoirs can be connected or have been connected, and in that the control system is equipped to switch the multi-way valve 49 during suction by the injection ~~pump 44 in~~ pump in such a way that a mixture is drawn in which is collected in the injection pump and/or to switch the multi-way valve 49 prior to suction by the injection ~~pump 44~~ pump.

28. (Currently Amended) Solid phase extraction instrument according to Claim 27, ~~characterised in that~~wherein the suction channel 47 of the injection ~~pump 44~~ pump connected to one side of the multi-way valve 49 is also a pressure channel and in that the multi-way valve 49 is further connected on the other side to the line system.

29. (Currently Amended) Solid phase extraction instrument according to Claim 27 ~~characterised in that~~wherein the solvent feed device 40 comprises at least a further multi-way valve 56 to which, on the one side, one of the solvent connections of the first multi-way valve 49 is connected and which, on the other side, is provided with further solvent connections.

30. (Currently Amended) Solid phase extraction instrument according to Claim 22, ~~characterised in that~~wherein the control system comprises input means for entering an operator's choice for

- a specific solid phase extraction process; and/or
- a specific solvent or combination of solvents; and/or
- a specific delivery pressure; and/or

- a specific suction speed; and/or
- a specific solvent volume; and/or
- a specific ration of solvent volumes.